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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,320	07/13/2004	Micah A. Carlson	1813-8124	6124

7590 02/19/2008  
Francis A Cooch Office of Patent Counsel  
The John Hopkins University  
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EXAMINER
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ROGERS, DAVID A

ART UNIT	PAPER NUMBER
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2856

MAIL DATE	DELIVERY MODE
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02/19/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/501,320	<b>Applicant(s)</b> CARLSON ET AL.	
	<b>Examiner</b> DAVID A. ROGERS	<b>Art Unit</b> 2856	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 17-24 is/are pending in the application.
- 4a) Of the above claim(s) 1-12, 17 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13 and 19-23 is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendments***

1. The applicant's arguments filed 17 January 2008 have been considered and are not convincing.

The applicant argues that Yoon cuts a corner using scissors, and the applicant's do not. With regard to claim 13 the means to cut are not claimed. Therefore, this argument is moot.

The applicant argues that Yoon cuts a corner so that air can be introduced, whereas the applicant's cut the corner to release the particulates. With regard to claim 13 it is noted that the corner may be used to introduce air, but the corner will inherently allow particulate matter to be released.

The applicant argues that Reid *et al.* teaches agitating a cargo container does not render the claim obvious. It is again noted to the applicant that a cargo container is just one embodiment of items that Reid *et al.* contemplates shaking. Reid *et al.* expressly states that the item can be another item such as a letter or box that is mailed.

The applicant argues that impermissible hindsight was used to establish the obviousness rejection as Megerle traps the particle in a filter, but does not sample the filter as a secondary check. It is noted that the rejection never set forth that Megerle performs a secondary check. Rather, official notice was taken that such a step is commonly known and would have been obvious in order to eliminate the possibility of a false-positive initial test. The applicant's response is not a proper traversal of the taking of official notice. Per MPEP

§2144.03 to properly and timely traverse the taking of official notice the applicant must specifically point out the supposed errors in the action, which includes stating why the noticed fact is not considered to be common knowledge or well known. Therefore, the common knowledge is now taken as fact.

### ***Claim Rejections - 35 U.S.C. § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 13 and 19-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term “high concentration” in claim 13 is a relative term which renders the claim indefinite. The term “high concentration” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Note that claim 22 also recites the limitation “high particle counts” which, for the reasons set forth above, is also improper under 35 U.S.C. 112, second paragraph.

### ***Claim Rejections - 35 U.S.C. § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole

would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 13, 18, 19, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent Application Publication 2004/0020264 to Megerle, United States Patent 4,275,875 to Akers, United States Patent Application Publication 2003/0136203 to Yoon, and United States Patent 4,718,268 to Reid *et al.*

Megerle claims priority to provisional application 60/330,807 filed 31 October 2001, which is before the conception date established by the applicants. The subject matter identified in the rejection is supported by the provisional application. Yoon claims priority to provisional application 60/344,635 filed 26 October 2001, which is before the conception date established by the applicants. The subject matter identified in the rejection is supported by the provisional application.

Megerle teaches a method and apparatus for screening mail to identify those items likely to contain contaminants. Mail items (reference item 4) are delivered to a plenum chamber (reference item 20) that has an air mover (reference item 30) associated with it. The mail items are delivered using pinch rollers, which compress the mail pieces. Megerle teaches that this act of compression will cause contaminants to be released into the air. Megerle also teaches the use of a sensing suite (reference item 24) for analyzing the air from the intake plenum for identifying the presence of contaminants.

It is noted that Megerle also traps the contaminants using a filter (reference item 28). Official notice was taken in the previous office action that it is known to perform confirmation testing in order to identify false-positive detections. This would eliminate the need for performing costly decontamination of the equipment that would have been done if the false-positive was not eliminated. As the applicant did not timely traverse the taking of official notice it is now considered to be fact.

Existing mail processing equipment uses pinch rollers throughout the delivery process. See, for example, the sorting/delivering system in Akers. Therefore, the air intake plenum in Megerle would be located near pinch rollers or other mail compressing means.

Megerle does not teach opening each mail item. However, Yoon teaches that it is known to open mail items using items such as a scissors (reference item 130) or a poking syringe (reference item 131). Yoon does this in order to facilitate release of the contaminants in the mail item. A poking syringe is considered to be a punch.

Megerle also does not teach shaking the mail items. Reid *et al.*, however, teaches that it is known to shake containers (reference item 10) to facilitate the release of contaminants into the air. See column 2 (lines 9-17). See also column 8 (lines 56-64) where the term --container-- is defined to include boxes, letters, and other mail items.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Megerle with the teachings of Akers,

Yoon, and Reid *et al.* in order to open each mail item and simultaneously shake and compress each mail item in order to facilitate the release of contaminants into to air for detection. It is considered obvious to simultaneously shake and compress the mail items in order to maximize the amount of contaminants released into the air since both shaking and compressing are already known, and there would have been a reasonable expectation of success that doing both simultaneously would also release contaminants.

With regard to claim 18 the scissors in Yoon are a form of a cutter.

With regard to claim 19 official notice is hereby taken that vacuuming is a well known method of cleaning debris from around a specific area. The use of vacuuming would have been an obvious expedient to clean up an area so that all of the cuttings could be properly disposed.

6. Claims 20-22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Megerle, Akers, Yoon, and Reid *et al.* as applied to claim 13 above, and further in view of United States Patent Application Publication 2003/0145664 to Schwarz *et al.*

Megerle teaches the detection of hazardous particles. With regard to claim 20 Megerle's sensors must operate to detect hazardous materials based on predetermined characteristic signatures of the particles. See paragraphs 46-48:

The sensors could include detectors that serve only to detect the presence of biological material in particles in the analyzed air stream, like the BIONI, manufactured by Pacific Scientific Instruments of Grant's Pass, Oreg.; the Biological Aerosol Warning System Tier III developed by MIT Lincoln Laboratories in Mass.; the UV-APS, manufactured by TSI

Inc. of St. Paul, Minn.; the UV-FLAPS and BARTS manufactured by General Dynamics Canada of Calgary, AB, Canada, or others. The sensors could also include a particle detector-based system like the Biological Aerosol Warning System Tier I, manufactured by Lockheed Martin of Manassas, Va. These types of sensors are preferred for the purposes of the present invention.

However, sensors could also take the form of fully-integrated, detecting and identifying biological agent sensors, utilizing UV fluorescence, as above, for detection of particles that contain biological molecules and automated immunoassay methods. There could include the Joint Biological Point Detection System (JBPDS) manufactured by Intellitec of Jacksonville, Fla., the 4WARN manufactured by General Dynamics Canada of Calgary, AB, Canada; IV fluorescence-modified Portal Shield or JBREWS manufactured by Sentel of Alexandria, Va.; or others, designed to detect and identify a plurality of biological pathogens. These type of sensors could be used because they have similar functionality, but are more expensive and larger because they perform additional functions.

Sensors for radiological particles or particles of low vapor pressure chemical warfare agents like VX could also be included in the sensor suite.

Megerle's sensors must also identify hazardous particles based on thresholds; i.e., the sensors must operate to exclude the detection of non-hazardous particles. However, Megerle does not expressly teach the use of a threshold for detecting hazardous particles.

Schwartz *et al.* teaches that it is known to identify hazardous particles based on size, which would be a threshold.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Megerle, Akers, Yoon, and Reid *et al.* with the teachings of Schwarz *et al.* in order to use a threshold for the detection of hazardous particles so not non-hazardous particles do not give false-positive indications.



With regard to claim 22 Schwartz *et al.* teaches that trusted mail can be separated from suspected mail. See, for example, paragraph 47. The suspected mail will be tested separately from the trusted mail.

### ***Allowable Subject Matter***

7. Claim 24 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: United States Patent 6,413,424 to Shelby teaches that filters are known to have serial numbers. However, there is no teaching to correspond the serial number with a group of unsuspected mail.

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 C.F.R. 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID A. ROGERS whose telephone number is (571)272-2205. The examiner can normally be reached on Monday - Friday (0730 - 1600). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David Rogers/  
Examiner - Group Art Unit 2856

/Hezron Williams/  
Supervisory Patent Examiner, Art Unit 2856